REVIEW OF THE STATISTICS PROGRAM

at the

NORTHEAST FISHERIES CENTER
NATIONAL MARINE FISHERIES SERVICE, NOAA

REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

Woods Hole, Massachusetts
July 13, 1989

Review Panel

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EXECUTIVE SUMMARY

This document summarizes the findings and conclusions of the Review Panel for the Fishery Statistics Program (FSP) at the Northeast Fisheries Center.

The Panel was impressed with the dedication and commitment of the NEFC staff as illustrated by their presentations and by the volume and breadth of statistics which are collected in the FSP. After listening to extensive staff presentations and dialogue between panelists and staff, it became evident that the FSP is truly a program and not a series of independent data sets. While it is often easy to imagine a better way to collect a specific type of data, the gain may be offset by losses in other types of information now provided by FSP. In a more rational world, it might be possible to weight the various series in their importance. Because of the many users and uses to which they are put, it is, however, very difficult to assign such weights.

It is the impression of the Panel that, in general, the FSP has evolved a set of data collection mechanisms which are highly efficient given the spatial and temporal variations involved, the multiplicity of series collected, and the range of uses and users involved. Given the current fiscal climate, however, the Panel discusses some options and offers some suggestions for consideration as the program continues to evolve.

The Review Panel is described in APPENDIX I. The organization, monetary and personnel resources, data collection systems and information flow, and the fisheries of the Northeast region are described in APPENDIX II. The laws authorizing or mandating the collection of fisheries statistics, and the information collected in National and Regional Collections are listed in APPENDIX III.

C O N T E N T S

NORTHEAST FISHERIES CENTER
NATIONAL MARINE FISHERIES SERVICE

POPULATION DYNAMICS BRANCH PEER REVIEW

REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

Prepared by
The Review Panel

Woods Hole, Massachusetts
July 9-11 1990

TABLE OF CONTENTS

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The provision of regular assessments of the state of the stocks within its jurisdiction should be regarded as a very high priority for the Center, in accordance with its Mission Statement. In the view of the Panel these in fact constitute the single most important product of the Center.

The Center has been subjected to severe budgetary restrictions and has a much reduced manpower and discretionary funding compared with recent times. The reductions in staffing levels have to some extent become concentrated in the Population Dynamics Branch.

The level of effort actually directed to the production of operational assessments (about 3 FTE) is much too small in relation to the size of the Center (335 FTE), and the number of assessments scheduled (about 40), in comparison with the levels deployed by comparable organizations in the US, Canada, and the UK.

Local management have exacerbated the situation by transferring capable staff to other groups within the Center, allowing scientific effort to become dissipated among too many projects and outside commitments, nationally and internationally, failing to pursue a positive and aggressive hiring policy, and failing to maintain technical support levels.

Failure to address these problems, and insensitive personal management at the Center and Division level, have led to a catastrophic decline in morale in what is certainly one of the most important Branches in the Center which has accelerated the voluntary departure of qualified staff. This is now adversely affecting the recruitment of new staff, and will continue to do so until morale is restored, since the problems are now known outside the Center, and were already known outside the US before the review was convened.

The organization of the Division places basic data collection and management in separate Branches and the Population Dynamics Branch, therefore, has almost exclusively an interpretative role. This organization, and the priority given by Division management to preserving data collection, have made the Branch vulnerable to attrition and voluntary staff movements. In addition the Branch has virtually no technical support, and research scientists are required to perform this work.

The nature of the work of the Branch requires quantitative and interpretative skills of a high degree. Since it produces one of the most easily identifiable and immediately valuable outputs of the Center, it should appropriately be regarded as a Center of Excellence. Its program should include a substantial element of research activity, roughly in the ratio 1:2 with the effort devoted to operational assessments.

It may be necessary to grade staff at relatively high levels compared with other Branches, in order to recruit and retain people with appropriate skills and qualifications, since these are highly marketable attributes.

The work of the Branch lacks focus and direction, partly because the customers have not clearly articulated their long-term needs, and partly because of lack of leadership within the Center. Elsewhere the necessary focus is often provided by the need to provide regular structured advice to national or international commissions. Some such mechanism may need to be established.

NATIONAL MARINE FISHERIES SERVICE
NORTHEAST FISHERIES CENTER

INFORMATION SERVICES SECTION PEER REVIEW REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

Prepared by

THE REVIEW PANEL

Milford, Connecticut
17-19 July 1990

TABLE OF CONTENTS

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EXECUTIVE SUMMARY

The Program Review Panel for the NMFS Northeast Fisheries Center's Information Services Section commends Center management for this first formal effort at reviewing the important function of information transfer. That the Center has added Information Services to the review process already established for scientific programs shows management concern for developing a more effective and efficient information program encompassing libraries, technical publishing, public affairs, public education, and graphics.

In summary, the Review Panel offers the following three observations:

1. The Information Services Section (ISS) should be regarded as an important link in fulfilling the Northeast Fisheries Center's (NEFC) scientific goals and output. The section can serve as management's "eyes and ears" and is, based on the panel's review, comprised of highly qualified professionals who can help management fulfill its goals. The ISS Chief should actively participate in management meetings as is done by information directors in other major institutions and government agencies. Furthermore, what is needed is more clear direction coming from Center management regarding further development of information products and services.

2. A strategic plan encompassing all components of the ISS should be developed, with directorate input and approval. The panel understands that three such draft plans in the area of public affairs have already been developed within the ISS. Now what is needed is to clarify that policy and to formulate and adopt an implementation plan involving all components (scientific publishing, public affairs, and libraries).

3. No matter how well a plan is developed, new personnel are needed to accomplish goals. In a perfect world without budgetary constraints, the panel recommends in order of priority:

(1) A public affairs specialist, located at Woods Hole and responsible for technical information dissemination.

(2) A librarian at the Milford Laboratory, and a professional librarian position at Woods Hole.

(3) A higher-level graphic arts coordinator at Woods Hole with expertise in desktop publishing/layout and computer graphics.

(4) A full-time library technician at the Oxford laboratory, and a full-time library technician at Sandy Hook

(upgraded from her current 80 percent time).

(5) Two editorial assistants, one to assist the scientific publications editor on a new manuscript tracking system and the other to assist in working with field installations.

The following report first provides an analysis of the organizational structure of the ISS, and then evaluates and provides recommendations regarding the section's components--publishing, public affairs, and libraries--along with rationale for new positions.

NORTHEAST FISHERIES CENTER

NATIONAL MARINE FISHERIES SERVICE

MARINE MAMMALS INVESTIGATION PEER REVIEW

REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

Prepared by

the Review Panel

Woods Hole, Massachusetts

26-28 March 1991

MARINE MAMMALS INVESTIGATION PEER REVIEW
REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

EXECUTIVE SUMMARY

A peer review of the Northeast Fishery Center's Marine Mammals Investigation (MMI) program was held on 26-28 March 1991. The Review Panel found the program to be well-conceived and properly oriented and, at present, to have adequate funding to do the priority tasks. Staffing, however, seems insufficient to effectively do priority planning and survey work that must be completed in the next 18-24 months. The Panel therefore recommends that, if possible, the staff be augmented with appropriately qualified temporary personnel to assist with priority planning and survey work that must be done in the next 18-24 months. In addition, the Panel notes that the program could and, if possible, should be augmented or strengthened in several areas to better meet high priority management requirements.

The National Marine Fisheries Service (NMFS) must provide Congress by February 1992 a recommended system for governing marine mammal-fishery interactions after October 1993 when the present exemption program expires. The Panel therefore believes that highest priority in FY91 and FY92 must be afforded to obtaining a reliable estimate of the harbor porpoise population(s) affected by the sink net fishery in the Gulf of Maine/Bay of Fundy area. Although necessary experimental work has been done in the last two years to evaluate possible survey methodology, the optimal survey design has not yet been determined. The Panel therefore recommends that a workshop be held as soon as possible to determine the survey design that will provide the required information at minimal cost. In this context, the Panel notes that the resources currently allocated for the design and conduct of the harbor porpoise survey may be insufficient to obtain a reliable population estimate and that it may be necessary to reprogram funds from lower priority programs.

The Panel also believes that high priority must be afforded in FY91 and FY92 to obtaining reliable estimates of the number of harbor porpoise being taken annually in the Gulf of Maine/Bay of Fundy sink net fishery and the number of beaked and pilot whales being taken annually in the offshore swordfish driftnet fishery. In this regard, the Panel notes with concern that the observer level in these fisheries is not yet sufficient to obtain adequately reliable information and that a schedule for producing the required incidental-take estimates has not yet been formulated.

In the near future, the Panel believes that priority must be afforded to development of programs to determine stock discreteness and to assess and monitor the abundance and diet of harbor seals

in the Northeast. In the long term, the Panel believes that highest priority must be afforded to obtaining information needed to effectively implement the Right Whale Recovery Plan, and secondarily, the Humpback Whale Recovery Plan presently being developed by the Service. In this regard, the Panel notes that effective implementation of these recovery plans will require the cooperative efforts of several Federal and state agencies, academic institutions and private groups, as well as several components of the National Marine Fisheries Service. The Panel recommends that, as soon as the recovery plans are completed, the NEC initiate efforts to further develop cooperative programs with other relevant organizations and components of the NMFS.

Finally, the Panel notes that MMI personnel are playing an important role in developing and implementing U.S. domestic and international policy regarding marine mammals. It recommends that these activities be encouraged and continued.

NORTHEAST FISHERIES CENTER
NATIONAL MARINE FISHERIES SERVICE

12 - MILE DUMPSITE STUDY PEER REVIEW

REPORT TO THE SCIENCE AND RESEARCH DIRECTOR

Prepared by

THE REVIEW PANEL

Sandy Hook, New Jersey
June 20 - 21, 1991

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EXECUTIVE SUMMARY

Success to date of the NEFC 12-Mile Dumpsite Study owes much to thoughtful planning and external review of that planning. Few studies are as explicit as this one in early definition of objectives and research strategies focused upon socially significant issues.

The Study's experimental design was considered excellent. Even with the benefit of several years of hindsight, Program investigators and reviewers would now make only minor changes in the original experimental design. However, important tests of the experimental design remain to be carried out. These statistical tests would determine the adequacy of the design to detect particular spatial or temporal differences if they truly existed.

Program direction and management seem to have been unusually effective, despite serious setbacks and resource limitations.

Findings reported to date are of great interest to the scientific community and, to the extent disseminated, to others. However, all panelists emphasize that the Study can provide much more valuable contributions to several classes of users. The Program must be given adequate time and a clear path to prepare and disseminate their most valuable findings -- to scientists, regional decisionmakers, school children, and the public. We make specific suggestions to facilitate information transfer to these groups.

This Study should be completed as the investigators plan and initiate their next major effort. Because the Panel is not thoroughly familiar with the competing demands for future efforts of this research team, we can not recommend a specific next study. However, plans of this research team to focus upon habitat assessment and restoration in regional estuaries relative to important fish stocks seem particularly appropriate and important. Despite the effectiveness of this "field experiment", the Panel had technical reservations about simply shifting study effort to assessment of dredged material disposal.

The Panel is unanimously enthusiastic about the collegial spirit and professional contributions of the Study participants. They made significant contributions under some exceptionally discouraging circumstances. We recommend that their outstanding efforts be recognized by presentation of a NOAA Unit Citation or other appropriate award.

Northeast Fisheries Science Center
National Marine Fisheries Service

Contaminant, Environmental, and
Seafood Quality Chemistry Peer Review

Report to the Science and Research Director

Prepared by
The Review Panel

Gloucester, Massachusetts
April 14 - 16, 1992

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

On April 14-16, 1992 a Peer Review Panel was convened to investigate the current status of the Contaminant, Environmental, and Seafood Quality Chemistry in the Northeast Fisheries Science Center. The Panel met with the NEFSC management staff in a closed session, followed by presentations of the various chemistry groups under review. The Panel then met in closed session for discussion and to prepare information for presentation to the Science and Research Director of the NEFSC. An agenda for the meeting is shown on pages 6 and 7.

The Panel, as listed on page 5, worked as a unit to discuss and prepare the final document as well as the debriefing outline. Individual panel members took primary responsibility for preparing a draft section of the document as assigned. Thus, in the final document, it is noted which panel member was the lead for the individual section. Although the style of presentation is individual, the general concepts were agreed upon by the entire Panel. The responses to questions, developed to guide the review, were prepared in a discussion session between Review Panel members and are listed on pp 22-26.

The Peer Review Panel noted that each laboratory and individual chemistry function had a unique mission and unique capabilities. A consensus of the Panel was that the location of each laboratory is appropriate to its mission. The capabilities of each of the units are meeting specific and well-defined needs. Within the chemistry investigations there are numerous significant accomplishments, for example but not inclusive: the development of the monoclonal antibody technology and techniques; the broad impact of the species identification methods development; and the holistic approach of the Environmental Chemistry Investigation. Several recommendations for future directions were made by the Review Panel and a few are given as example: development of molecular biology techniques with the numerous applications apparent in the NEFSC; expanded marine biotoxins research; greater emphasis on nursery grounds and recruitment areas for molluscan shellfish.

Recognizing that budgetary limitations exist, the Review Panel encourages more scientific exchange with extra-mural scientists both by attendance at scientific meetings, by working in other NMFS and government laboratories, as well as by bringing in scientists using means such as the IPA. Numbers of staff should be enhanced in some research areas, especially those identified in the individual review statements.

In order to respond to the broad and diverse chemistry needs of the agency as outlined in the Strategic Plan, the chemistry units should be maintained in an up-to-date mode. Sophisticated analytical techniques cannot be brought on-line or to a responsive

mode in a timely fashion by those unfamiliar with the equipment or the current analytical techniques. The chemistry resources of the NEFSC should be nurtured and enhanced when possible to meet the needs of the future. These needs will certainly include significant support of seafood safety, quality, and risk evaluation as well as fishery management needs for predictive and real-time information on biotoxins as well as contaminants.